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THE CENTER LINE

MONTANA HIGHWAY COMMISSION

Vol. IV., No. 4. May, 1961

COMMON SENSE AND DISCIPLINE

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Training-in-Service Engineer

Let's Take a Look at This Thing Called Discipline

It is generally agreed among administrative circles that, organizations which run more efficiently have good discipline regarding employee behavior and have less frequent cause to impose specific disciplinary actions on employees. The foundations of constructive employee discipline are the established policies and consistent supervisory behavior.

We Ask Why

The answer is not as easy as one would assume, however, it is agreed that discipline should be an instructive, not a retaliatory device. The best discipline is established and maintained not through the application of disciplinary action but rather through a positive approach toward supervisory practices that tend to develop attitudes in employees toward their work which motivate them to perform in an acceptable manner and minimizes the need for authority and status to induce favorable behavior.

In Spite of This

It must be clearly understood that discipline is sometimes necessary in order to discourage the kind of individual employee behavior which is detrimental to the efficient operations of the organization.

The best supervisor in the world may sometimes be faced with situations requiring severe disciplinary action. There are, after all, occasions which arise which make any other solutions impractical or even impossible.

It is up to the supervisor—not anyone else—either to take the necessary action, or in certain cases, to start the wheels rolling for that action. Maintaining discipline is an integral part of a supervisors regular job; he cannot pass it off to some other person.

The Correct Approach Is Most Important

Administering discipline is tough, and any normal human being has a distaste for the unpleasantries which sometimes arise as a result of applying disciplinary measures. Sometimes supervisors actually fear this part of their job. They may have heard rumors that it is practically impossible to fire a state employee, and that it is difficult to discipline them even in lesser degrees. This is just not true. A considerable number of state employees are fired and stay fired each year.

On the other hand, you may hear people say that state employment is unstable and that no consideration is given for longevity and that it is nothing to fire a state employee on short notice, even a career veteran. Generally speaking, this is not true either, and it should not be true. Firing an employee of any organization is far too serious to be taken lightly.

How Tough Is This Chore?

Just how tough is it then, to take disciplinary action. For example, firing! This depends on how intelligently you, the supervisor, handles the particular situation. It can be a pretty disgusting and humiliating experience, or it can merely be a chore, a little harder than usual. It is up to you as a supervisor. When a disciplinary action goes sour it may be the supervisor's fault or it may be higher line management's fault in initiating action without proper preparation and without sufficient information. In disciplinary actions, as in other aspects of administration and management, the direct sincere, and calm approach is the right one.

See note at bottom of page two

AWARD SHEET — Letting of March 22, 1961

PROJECT NO.	Amount of Bid	Bidder	Address
I 15-1(11)37 Unit 1 Idaho Line-Silver Bow County Line Road Beaverhead County	$1,043,487.45	Nilson-Smith Const. Co.	Great Falls, Mont.
I 15-1(11)37 Unit 2 Idaho Line-Silver Bow County Line Road Beaverhead County (Structures)	$ 222,558.72	Ralph Huckaba	Whitehall, Mont.
I 15-1(11)37 Unit 3 Idaho Line-Silver Bow County Line Road Beaverhead County (Fencing)	$ 29,997.97	Hildreth Construction	Armstead, Mont.
I 15-5(13)239 Unit 1 Hardy Creek-Cascade Sect. Cascade County	$1,741,788.17	Baltrusch Const. Co. & Affiliates	Havre, Mont.
I 15-5(13)239 Unit 2 Hardy Creek-Cascade Sect. Cascade County (Structures)	$ 220,912.08	A&B Construction Co.	Helena, Mont.
I 15-5(13)239 Unit 3 Hardy Creek-Cascade Sect. Cascade County (Fencing)	$ 60,050.85	Clair Boulet Const. Co.	Butte, Mont.
U 103(7) Unit 1 Lewistown-Roy Road Fergus County	$ 52,716.90	Walling Const. Co.	Lewistown, Mont.
F 191(20) Unit 1 Pahlo-Kalispell Road Lake County	$ 281,156.53	Curtis Const. Co.	Spokane, Wash.
F 235(27) Unit 1 Armington-Lewistown Rd. Cascade & Judith Basin Counties	$ 477,170.89	S. Birch Inc. & S. Birch & Sons Cons.	Great Falls, Mont.
F 333(29) Unit 1 Grass Range-Malta Road Fergus County	$ 545,557.75	R. J. Sundling, Contractor	Livingston, Mont.
S 7(6) Unit 1 Kalispell-Half Moon Road Flathead County	$ 457,921.94	United Paving Co.	Spokane, Wash.
S 13(5) Unit 1 Rudyard-Goldstone Road Hill County	$ 327,239.94	O'Neil Const. Co.	Havre, Mont.
S 330(1) Unit 1 East Helena-Southwest Rd. Jefferson & Lewis & Clark Counties	$ 119,955.70	Hilde Const. Co.	Great Falls, Mont.

I 15-1(11)37 Unit 3 and S 13(5) Unit 1—Awards held pending further study.
All other projects awarded.

AWARD SHEET — Letting of April 19, 1961

PROJECT NO.	Amount of Bid	Bidder	Address
I 94-4(6) 136 Unit 1 and F 86(20) Unit 1 Miles City-East Section Custer County	$2,849,375.73	Peter Kiewit Sons' Co.	Billings, Mont.
I 94-4(6) 136 Unit 2 Miles City-East Section Custer County (Fencing)	$ 62,799.00	Walter Mackin & Son	Billings, Mont.
F 191(21) Unit 1 Pahlo-Kalispell Road Flathead County	$ 252,742.13	United Paving Co., Inc.	Spokane, Wash.
F 215-D, S 218(4)S 218(5) S-US 220(2) & S 298(2) Brooks St., Middlesex St. North and South Aves. 39th St. & Russel St. Intersection Missoula County	$ 92,575.56	Asphalt Construction Co.	Missoula, Mont.
F 260(9) West Glacier-East Glacier Park Road Flathead Co. (Steel Guard Rail)	$ 45,393.75	Roy T. Armstrong & Sons	Miles City, Mont.
S 328(1) Conner-Cutoff Road Ravalli County	$ 228,546.43	Bud King Const. Co.	Missoula, Mont.
F 86 (19) Montana Ave.-Baker Road Fallon County	$ 165,351.46	Northern Improvement Co.	Fargo, N. Dak.
F 156(11) Unit 2 Olive-Miles City Road Custer Co. (138' Structure)	$ 49,164.09	Holm Const. Co.	Glendive, Mont.

Total for Year so far $11,575,116.69

Every once in a while, we find a poem or an article that seems to be very appropriate and proves that highway building is similar throughout the land. This little poem gave us several chuckles. We will not attempt to change any of the names or locations but they would be very obvious to those who have followed the progress of the Interstate Highway in Montana. We wish to thank Western-ITE, the publication of the Western Section of Traffic Engineers for permission to print this little jewel.

"BEAUTIFUL DREAMER"
OR
"THROUGH MAGIC VALLEY OR BUST"

The law was signed
By the U. S. Congress
Forty-one thousand miles
Of Interstate progress.

The contents were windy
And one couldn't quote it
But that was expected
After all, lawyers wrote it.

Built it fast and sturdy
In thirteen years
A great super highway
That has no peers.

The States responded
With waste cut to zero
Plans were made ready
In spite of the Bureau

Sections were built
With four lanes dividing
To keep drunken drivers
And their cars from colliding.

Progress was good
From the effort that was shown
When into the works
A small wrench was thrown.

Northeast of Twin Falls
There developed a hitch
From the area farmers
Came a very loud bitch.

Put it north in the desert
Were their unanimous views
Out of the way
For even jack rabbits to use.

Mr. Tisdale undaunted
Picked the best route
The farmers then threatened
Our hero to shoot.

Let's take it to court
Said one farmer to another
We'll get a fair trial
The judge is my brother.

The judge's decision
A most ridiculous sight
Reminding one of Shakespeare's
"Idiot's Delight."

"The route needs more study"
His Honor thus said
Pearls of wisdom
From a most empty head.

But our hero complied
And considered it a lark
The solution was simple,
Just desecrate a park.

I'll remove the Snake River
And let the roadway remain
No, that won't work
The fish will complain.

He struggled and sweat
And worked in a daze
As into the crystal ball
For the answer he did gaze.

The end came suddenly
With a thunderous clap
Came the men in white
As his wig he did snap.

As they strapped him down
Our hero did say
"I'll find it, I'll find it,
There must be a way."

This sad tale is ended
This sad story is through
But don't laugh, good friends
It could happen to you.

NOTE—This is the first of a series of articles on **"Common Sense and Discipline."** The next series, the **"Purpose and Types of Disciplinary Action,"** will appear in the next issue of CENTER-LINE. Further articles on this subject will appear in succeeding issues.

NATIONAL HIGHWAY WEEK

By authority of the Congress of the United States, and by proclamation of the President, May 21-27 has been designated as National Highway Week. The Resolution to call attention to the highways was introduced by Rep. Fallon of Maryland, a long-time friend of highways in this country. It was passed by the House and concurred in by the Senate.

Governor Nutter will use his office to assist in the promotion of the week in Montana, and a committee has been formed to coordinate the activity of the week. Meeting as such a committee were Jack Marlow, Al Erickson, Vern McCullough, and Dewey Wright.

In Montana, it is intended that the week will serve to point out to the general public the great economic benefits derived from our highways, and to remind people that the job of building highways is never done.

Our nation is rapidly becoming a nation dependent upon the wheels using the highways. Nearly everyone owns an automobile, and many people own two or three. Our lives revolve around the automobile. Wheels carry us to work, worship, and play. Our goods move to and from market on a vast, complex network of highways. Wheels carry our children to school.

Year by year, these wheels turn faster and carry bigger loads, and each year, the highway engineers are harder pressed to provide surfaces safe enough and adequate enough for the use that the roads receive.

National Highway Week will call our attention to the fact that too many of our highways are woefully inadequate to handle today's needs or tomorrow's trends.

National Highway Week will be a fitting time to remind us all that better highways SAVE LIVES, SAVE TIME, AND SAVE MONEY.

AIR TOUR SCHEDULED

In order to provide a first hand account of the highway work presently under way in Montana, we have often thought it would be a good idea to take our friends of press, radio and TV out over the jobs and explain to them the step by step description of the job. This dream will finally be realized on June 6, 7, 8 and 9 when, through the cooperation of many of our contractors and suppliers, we shall be able to take our friends on an aerial tour of the state. As it is planned now, the tour will be divided into four sections, starting in the western part of the state on June 6. An aerial view will be given all or most of the larger jobs from Butte to Kalispell and Missoula, and an on the ground tour of the Superior Interstate Contract and the new Superior Airport will be given our guests. That evening in Missoula, we hope to get together for an informal dinner and a question and answer period. The following day, we'll meet our guests in Great Falls and show them the Lewistown jobs, the Grass Range to Roy road, and the Robinson Bridge, Shelby and Sunburst Interstate jobs, and an on the ground tour of the Great Falls-Vaughn job. On the 8th we'll view the jobs in the Livingston, Hardin, Billings Area, and the tour will wind up the 9th in the Miles City, Glendive, Glasgow area.

We sincerely hope that each paper, Radio station and Television Station will be represented on the tour that they would be interested in, and that the things they see, will prove to be beneficial and interesting. There are many things of interest to be seen as one flies over Montana, and we'll endeavor to show many of the landmarks and man-made structures that make this the "Great Land."

FIELD TRAINING WORKSHOP HELD

Training seems to be a never-ending portion of all our lives, but in the Highway Department, it is gratifying to see those that have had the benefit of much training and experience take the time and effort to help those coming up the ladder with advice and training. Such was the case in Glendive last month, when Bob Roundtree and Bill Brittain called their Project Engineers, Instrumentmen and equivalent materials and field personnel in for a session on the actual problems apt to be met every day in the field.

Fly lines, utility crossings and moves, fence crossings, spiral curves, travers locations, urban ties, use of Rhodes Arc, check levels, irrigation facilities, control of aerial photography and many other field procedures were discussed, and proper instruction was given by Bob and Bill. We hope that other divisions will follow suit, and if there are others that would like to do this sort of a seminar, Bob Roundtree will be very glad to provide you with notes and suggestions.

The dual bridge under construction is the Interstate Bridge across the Yellowstone River on Interstate 94 at Billings. Cahoon Construction Company has the contract for $808,983.00 to construct this 937-foot bridge. Work is progressing nicely, and it is scheduled for completion in early winter of this year.

FRONT LINE SUPERVISOR TRAINING

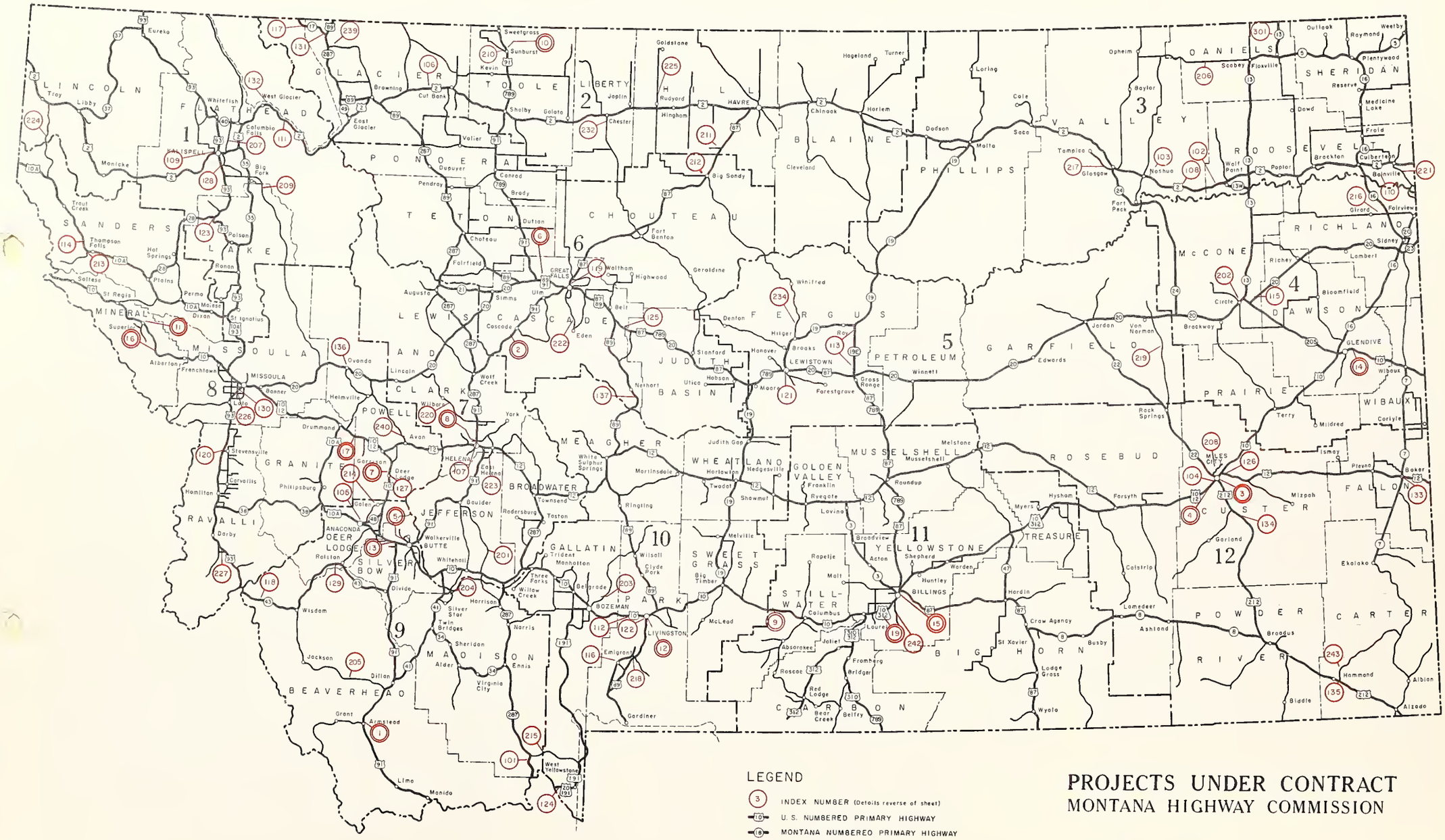
The Training-in-Service Department in cooperation with certain administrative officers of the Montana Highway Department, conducted a full day and evening session for training "Front Line" Supervisors in some of the more basic principles of management and supervision.

This session was a part of an overall administrative training program which began in February, 1958 when nineteen of the top administrative officers of the Department attended a week long Development Conference conducted in Helena in cooperation with the Montana State Board for Vocational Education.

This initial session was followed by a Middle Management Training Course in Helena from March 21 through March 25, 1960. This course was participated in by twenty-four intermediate level supervisors. The conference leaders were chosen equally from the faculty of the Montana State University at Missoula and various industrial organizations within the state. Dr. Paul Blomgren, Dean of the School of Business Administration, acted very ably as conference leader and contributed a great deal to the course by drawing from his experience with the Michigan Highway Department as a consultant in Management Training and Personnel Development.

The more recent "Front Line" Supervisor Training Course was geared to low level supervision with the curriculum arranged largely on the results of an audience survey made in connection with the "Middle Management" course. The

(Continued on page 5)



LEGEND

- (3) INDEX NUMBER (Details reverse of sheet)
- (10) U. S. NUMBERED PRIMARY HIGHWAY
- (8) MONTANA NUMBERED PRIMARY HIGHWAY
- SECONDARY HIGHWAY
- 10 FINANCIAL DISTRICT NUMBER

PROJECTS UNDER CONTRACT
MONTANA HIGHWAY COMMISSION

APRIL 21, 1961 (Includes contracts let April 19, 1961)

Map Index Number	Project Number	Probable Completion Date	LENGTH, TYPE OF CONSTRUCTION AND LOCATION
	FEDERAL AID INTERSTATE PROJECTS		
1	I 15-1 (11) 37 U 1	9-30-62	7.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. (U. S. 91 - South to North of Armstead).
	I 15-1 (11) 37 U 2	6-30-62	Four prestressed concrete beam structures. One 143 foot - Red Rock River, One 107 foot - County Road Separation, One 153 foot - Horse Prairie Interchange, One 173 foot - Beaverhead River. (U. S. 91 - South to North of Armstead).
	I 15-1 (11) 37 U 3	9-30-62	7.8 miles fencing and cattle guards (U. S. 91 - South to North of Armstead).
2	I 15-5 (13) 239 U 1	6-30-62	9.7 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Same construction on frontage road. (U. S. 91 - South to North of Cascade).
	I 15-5 (13) 259 U 2	10-31-61	Four prestressed concrete beam structures. One 133 foot - Tintinger Interchange, One 82 foot - Frontage Road Separation, One 138 foot - South Cascade Interchange, One 123 foot - North Cascade Interchange. (U. S. 91 - South to North of Cascade).
	I 15-5 (13) 239 U 3	6-30-62	9.7 miles fencing. (U. S. 91 - South to North of Cascade).
3	I 94-4 (6) 136 U 1	6-30-62	11.6 milee grading, drainage, aggregate surfacing, Portland Cement paving, plant mix bituminous and seal coat oiling. Three 20 foot and two 10 foot concrete slab junior grade separations. One 168 foot prestressed concrete beam structure - Baker Road Interchange U. S. 12 (U. S. 10 - Miles City East).
	I 94-4 (6) 136 U 2	6-30-62	11.6 miles fencing (U. S. 10 - Miles City East).
4	I 94-4 (3) 134	7-31-61	One 268 foot steel girder overpass - Miles City West Interchange. One 290 foot riveted plate girder bridge - Tongue River. Two prestressed concrete beam overpasses. One 153 foot County Road, and one 158 foot - U. S. 212 (U. S. 10 - Miles City West).
	I 94-4 (5) 127 U 1	9-15-61	8.5 miles (0.8 miles four lane divided) grading, drainage, surfacing, Portland Cement paving, plant mix bituminous and seal coat oiling. One 214 foot prestressed concrete beam overpass - Radar Base Interchange. Three concrete slab junior grade separations. (U. S. 10 - Miles City West).
	I 94-4 (5) 127 U 2	7-1-61	8.5 miles fencing (U. S. 10 - Miles City West).
5	I 15-2 (7) 127	6-30-61	Dual 168 foot steel girder overpasses - Montana Street Interchange (U. S. 91 - In Butte).
6	I 15-5 (9) 275 U 1	5-1-61	8.3 miles four lane divided, grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 91 - West of Great Falls).
	I 15-5 (9) 275 U 3	5-31-61	8.3 miles fencing (U. S. 91 - West of Great Falls).
7	I 90-3 (8) 180 U 1	8-31-61	8.6 miles (1.0 mile four lane divided) grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 10 North and South of Deer Lodge).
	I 90-3 (8) 180 U 2	8-31-61	Six prestressed concrete beam bridges, One 123 foot - North Deer Lodge Interchange, One 118 foot Milwaukee Avenue, One 168 foot - County Road, Dual 153 foot - Clark Fork, One 256 foot - Underpass South Deer Lodge Interchange, and two 20 foot concrete slab junior grade separations - County Roads (U. S. 10 - North and South of Deer Lodge).
	I 90-3 (8) 180 U 3	5-1-61	8.6 miles fencing (U. S. 10 - North and South of Deer Lodge).
8	I-IG-ING 15-4 (4) 184 U 1	5-1-61	1607 foot total length dual steel and concrete overpasses - GR RY and RY., Boulder Avenue (U. S. 91 - Helena).
	I-IG-ING 15-4 (4) 182 U 2	9-15-61	2.8 miles four lane divided, grading, drainage, surfacing, plant mix bituminous and seal coat oiling. Dual 260 foot steel girder bridges - Underpass - Colonial Club Interchange (U. S. 91 - Helena - South).
	I-IG-ING 15-4 (4) 182 U 3	6-1-61	2.8 miles fencing and cattle guards (U. S. 91 - Helena - South)
9	I 90-8 (7) 394	12-31-61	One 558 foot - Riveted Plate Girder Bridge - Yellowstone River (U. S. 10 - West of Columbus).
10	I-IG 15-8 (6) 379 U 1	7-31-61	4.2 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. One 313 foot steel girder - GR RY. One 168 foot prestressed concrete beam - Sunburst Interchange - Overpasses (U. S. 91 - Sunburst North).
	I-IG 15-8 (6) 379 U 2	5-15-61	4.2 miles fencing and cattle guards (U. S. 91 - Sunburst North).
	I 15-8 (10) 379	7-30-61	4.2 miles signing and delineation (U. S. 91 - Sunburst North).
11	I 90-1 (6) 43 U 1	8-15-61	6.7 miles (1.2 miles four lane divided) grading, drainage, surfacing, plant mix bituminous and seal coat oiling. One concrete slab junior grade separation (U. S. 10 - North and South of Superior).
	I 90-1 (6) 43 U 3	6-1-61	6.7 miles fencing and cattle guards (U. S. 10 - North and South of Superior).
12	I 90-7 (4) 330	9-30-61	730 foot - Dual Structures - Riveted Plate Girder Bridges - Yellowstone River (U. S. 10 - South of Livingston).
	I-IG 90-7 (9) 327 U 4	8-31-61	4.3 miles grading and sub-ballasting only of Northern Pacific Railway Line (U. S. 89 - South of Livingston).
	I-IG 90-7 (9) 327 U 1	6-15-62	11.8 miles (11.0 miles four lane divided) grading, drainage, surfacing, plant mix bituminous and seal coat oiling. Construction of irrigation and water supply facilities (U. S. 10 - West and East of Livingston).
	I-IG 90-7 (9) 327 U 2	8-15-61	Ten prestressed concrete beam structures. Dual 113 foot overpasses - West Interchange, Dual 251 foot overpasses - South Interchange, Dual Junior Grade Separation - Farm Road, Dual 122 foot overpasses, Swingly Interchange, one 273 foot underpass - East Interchange, one 210 foot underpass - Mission Interchange (U. S. 10 - West and East of Livingston).
	I-IG 90-7 (9) 327 U 3	8-15-61	11.8 miles fencing and cattle guards (U. S. 10 - West and East of Livingston).
13	I-ING 15-2 (8) 118	7-1-61	4.2 miles (2.5 miles four lane divided) grading, drainage, surfacing, plant mix bituminous and seal coat oiling, three prestressed concrete bridges, one 214 foot Victor Interchange, one 559 foot and one 614 foot Br...RY., Clark Fork RY, and Clark Fork (U. S. 91 - West of Butte).
	I 15-2 (10) 118	6-1-61	4.2 miles signing and delineation (U. S. 91 - West of Butte).
14	I 94-6 (2) 216	6-15-61	4.2 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 10 - East of Glendive).
15	I 90-8 (10) 451	6-30-62	930 and 945 foot (dual) steel riveted plate girder bridges - Yellowstone River (U. S. 10 - East of Billings).
16	I 90-1 (7) 60 U 1	5-1-61	5.0 miles signing and delineation (U. S. 10 - Southwest of Superior).
17	I 90-3 (5) 157 U 1	5-1-61	9.6 miles signing and delineation (U. S. 10 - East of Drummond).
19	I 90-8 (8) 438 U 1	9-1-61	6.4 miles four lane, grading, drainage, surfacing, plant mix bituminous and seal coat oiling. Same construction on frontage roads. Two 153 foot prestressed concrete beam overpasses - Deer Dump Separation (U. S. 10 - West of Billings).
	I 90-8 (8) 438 U 2	10-1-61	6.4 miles fencing (U. S. 10-West of Billings).
	FEDERAL AID PRIMARY PROJECTS		
101	FAP 60-A	1961	8.9 miles grading, drainage, surfacing and bituminous surface treatment. One 260 foot prestressed concrete girder bridge - Madison River (Montana 287 - South of Ennis).
	ADV FAP 60-A	7-15-61	8.9 miles fencing (Montana 287 - South of Ennis)
102	F 64 (29)	7-1-61	7.3 miles plant mix bituminous and seal coat oiling (U. S. 2 - Wolf Point West).
	F 232 (4)	7-1-61	8.0 miles plant mix bituminous and seal coat oiling (U. S. 2 - Wolf Point West).
103	F 144 (5)	7-1-61	2.0 miles plant mix bituminous and seal coat oiling (U. S. 2 - In Nashua).
	F 169 (5)	7-1-61	8.2 miles plant mix bituminous and seal coat oiling (U. S. 2 - Nashua East).
104	F 135 (17)	9-15-61	0.6 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 10 - Miles City West).
105	F 66 (9)	7-1-61	6.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 10 A - Anaconda East).
106	F 220 (7)	6-30-61	0.5 miles grading, drainage, surfacing, road mix bituminous and seal coat oiling (U. S. 2 - West of Cut Bank).
107	F 214 (3) U 1	9-15-61	1.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 91 - Helena).
108	F 169 (4) U 1 & F 232 (3) U 1	7-1-61	8.2 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 2 - West of Wolf Point).
109	U 58 (23) U 257 (14) U 1 F 270 (7) U 1	7-1-61	2.2 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 2 & 93 - In Kalispell).
110	F 84 (27)	7-1-61	6.3 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 2 - East of Culbertson).
	F 84 (28)	7-1-61	5.5 miles plant mix bituminous and seal coat oiling (U. S. 2 - West of Culbertson East).
	F-FG 273 (11)	7-1-61	0.8 miles plant mix bituminous and seal coat oiling (Montana 16 - Culbertson South).
111	FAP 13-F6	1961	2.1 miles grading, drainage and surfacing (U. S. 2 - East of West Glacier).
112	F 185 (6) U 1	6-15-62	0.3 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 10 - West of Livingston).
	F 185 (6) U 3	8-15-61	0.3 miles fencing (U. S. 10 - West of Livingston).
113	F 333 (29) U 1	8-18-61	11.8 miles cement base stabilizing, plant mix bituminous and seal coat oiling (Montana 19 E - North of Grass Range).
	F 26 (6) U 1 & F 333 (27) U 1	11-15-61	11.2 miles grading, cement stabilized base, drainage, surfacing, plant mix bituminous and seal coat oiling (Montana 19 E - Grass Range North).
	F 333 (27) U 2	9-30-61	Four prestressed concrete beam bridges. One 92 foot Colorado Creek, One 82 foot Chippewa Creek, one 92 foot Ford's Creek, One 62 foot Little Box Elder Creek (Montana 19 E - Grass Range North).
114	FAP 6 D 5	1961	2.3 miles grading, drainage, surfacing, and road mix bituminous oiling (U. S. 10 A relocation - West of Thompson Falls).
115	F 391 (13)	7-15-61	9.1 miles surfacing, plant mix bituminous and seal coat oiling (Montana 20 - East of Circle).
116	F 217 (12) U 1	9-30-61	21.3 miles surfacing, plant mix bituminous and seal coat oiling (U. S. 89 - South to North of Emigrant).
	F 217 (13) U 1	9-30-61	2.7 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 89 - South of Emigrant).
	ADV F 217 (13)	8-31-61	Fencing, 868 rods new, 883 rods resetting. (U. S. 89 - South of Emigrant).
117	FAP 44A & 14A	1961	10.9 miles grading, drainage, surfacing, and bituminous surface treatment (Montana 17 - Northwest of East Glacier).
118	FAP 20-B	1961	9.4 miles grading, drainage, and four 60 foot concrete slab bridges. Three over Trail Creek and one over Ruby Creek (Montana 43 - West of Wisdom).
119	U-F-FG 395 (4)	11-30-61	One 1126 foot steel riveted plate girder bridge - GR RY and Missouri River (U. S. 87 - Bypass - Great Falls North).
120	F 259 (9)	9-30-61	14.5 miles raising of various grades, plant mix bituminous and seal coat oiling (U. S. 93 - North and South Stevensville Junction).
121	U 103 (7) U 1	7-1-61	0.3 miles grading, aggregate surfacing, plant mix bituminous and seal coat oiling (Montana 19 - In Lewistown).
122	F 13 (6)	8-31-61	4.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 89 - South of Livingston).
123	F 191 (20) U 1	9-1-61	7.3 miles (2.5 miles grading and drainage) aggregate surfacing, plant mix bituminous and seal coat oiling (U. S. 93 - North of Polson).
124	FAP 46-A4	1961	8.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. One 60 foot reinforced girder bridge - South Fork Madison River (U. S. 191 - West of West Yellowstone).
125	F 235 (27) U 1	10-31-61	5.1 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling. Three 83 foot prestressed concrete beam bridges - Otter Creek (U. S. 87 - Southeast of Belt).
126	F 86 (20) U 1	6-30-62	0.8 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling (U. S. 12 - East of Miles City).
127	F 184 (14)	8-31-61	1.1 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (U. S. 10 - North and South of Deer Lodge).
128	F 191 (21)	9-1-61	7.2 miles widening roadway, aggregate surfacing, plant mix bituminous and seal coat oiling (U. S. 93 - Kalispell South).
129	F 43 (14) U 2	6-16-61	1.9 miles grading, drainage, surfacing, and bituminous surface treatment of approaches to bridges on F 43 (14) U 1. (Montana 43 - East and West of Ralston).
130	FAP 215-D	9-1-61	Traffic controls on Brooks Street, Middlesex Street, and North Avenue Intersection (U. S. 93 - In Missoula).
131	F 208 (3)	7-15-61	0.9 miles grading, drainage, surfacing, road mix bituminous and seal coat oiling. One 122 foot prestressed concrete beam bridge - Kennedy Creek (U. S. 89 - North of Browning).
132	F 260 (9)	8-1-61	20,175 feet steel guard rail (U. S. 2 - West Glacier East).
133	F 86 (19)	9-1-61	1.1 miles grading, drainage, cement stabilized base, plant mix bituminous and seal coat oiling (U. S. 12 - In Baker).
134	F 156 (11) U 2	11-30-61	One 138 foot prestressed concrete beam bridge - Pumpkin Creek (U. S. 212 - South of Miles City).
135	F 262 (12)	7-15-61	11.0 miles stabilized surfacing, plant mix bituminous and seal coat oiling (U. S. 212 - Hammond Southeast).
136	F 237 (16) & F 267 (11)	9-15-61	29.8 miles (intermittent raising of grading) surfacing, plant mix bituminous and seal coat oiling (Montana 20 - West and East of Ovando).
137	FAP 32-A9	1961	5.0 miles grading, drainage, surfacing, and bituminous surface treatment (U. S. 89 - South of Neihart).
	FEDERAL AID SECONDARY PROJECTS		
201	S 9 (9)	7-31-61	8.5 miles surfacing, plant mix bituminous and seal coat oiling (Southeast of Boulder).
202	S 31 (5)	7-15-61	0.6 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (In Circle).
203	S 370 (12)	7-30-61	5.8 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Northeast of Bozeman).
204	S 160 (1)	6-30-61	One 245 foot - prestressed concrete beam bridge - Jefferson River (North of Silver Star).
205	S 35 (10)	9-30-61	15.9 miles surfacing, plant mix bituminous and seal coat oiling (West of Dillon).
206	S 8 (10)	9-15-61	9.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (West of Scobey).
207	S 7 (6) U 1	9-1-61	6.5 miles (1.9 miles four lane divided) grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling (East of Kalispell).
208	S 388 (1)	7-15-61	8.6 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. One 198 footprestressed concrete beam bridge - Sunday Creek (North of Miles City).
209	S 65 (4)	9-1-61	4.9 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Southeast of Big Fork).
	ADV S 65 (4)	6-1-61	Fencing, 420 rods new, 79 rods resetting (Southeast of Big Fork).
210	S 366 (5)	7-30-61	0.5 miles surfacing, plant mix bituminous and seal coat oiling (In Sunburst).
211	S 242 (1)	6-15-61	4.4 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling. One 75 foot treated timber trestle - Big Sandy Creek (North of Big Sandy).
212	S 219 (4)	6-15-61	8.0 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Big Sandy - West).
213	S 221 (1)	8-30-61	5.0 miles grading, drainage, and surfacing (West of Thompson Falls).
214	S 304 (5)	9-1-61	6.7 miles grading, drainage, and surfacing (Galen West).
	ADV S 304 (2)	7-1-61	Fencing, 50 rods new, 1294 rods resetting (Galen West).
215	SAFO 40 (1)	1961	3.8 miles grading (Through Earthquake Slide - Southeast of Ennis).
216	S 361 (10)	9-30-61	5.5 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (East of Girard).
217	S 257 (4)	7-1-61	3.8 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Glasgow - West).
218	S 273 (3) U 1	9-30-61	0.8 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Northeast of Emigrant).
219	S 258 (3)	10-15-61	6.7 miles grading, drainage, and aggregate surfacing (North of Rock Springs).
220	S 2 (7)	5-1-61	7.3 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Wilborn - Southeast).
221	S 180 (1)	9-15-61	7.6 miles grading, drainage, aggregate surfacing and One 100 foot treated timber trestle bridge - Little Muddy Creek (Bainville Southeast).
222	S 329 (4) U 1	9-30-61	10.3 miles drainage, aggregate surfacing, plant mix bituminous and seal cost oiling (Eden North).
223	S 330 (1) U 1	9-15-61	2.5 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling (East Helena Southwest).
224	FHP 5-2 (1)	1961	4.7 miles grading and drainage (South of Troy).
225	S 13 (5)	10-31-61	5.3 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling (Rudyard North).
226	S 218 (4)	9-1-61	1.4 miles aggregate surfacing, plant mix bituminous and seal coat oiling (39th Street - South of Missoula).
	S 218 (5)	9-1-61	Traffic Controls (Brooks & Russell Street Intersection - South of Missoula).
	S-US 220 (2)	9-1-61	1.2 miles grading, drainage, aggregate surfacing, plant mix bituminous and seal coat oiling (Higgins Avenue Extension - South of Missoula).
	S 298 (2)	9-1-61	Traffic Controls (Brook Street & South Avenue Intersection - South of Missoula).
227	S 328 (1)	10-31-61	1.2 miles grading, drainage, aggregate surfacing, road mix bituminous and seal coat oiling. Two prestressed concrete beam bridges, One 173 foot - West Fork Bitterroot River, One 198 foot - East Fork Bitterroot River.(South of Derby).
232	S 303 (4)	6-25-61	5.3 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Chester South).
234	S 68 (4)	7-31-61	10.5 miles plant mix bituminous and seal coat oiling (Hilger North).
239	S 266 (1)	8-1-61	9.8 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Northwest of Browning).
240	S 291 (4)	6-30-61	6.3 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Avon Northwesterly).
241	S 322 (5) U 2	5-15-61	5.1 miles grading, drainage, surfacing, plant mix bituminous and seal coat oiling (Hardin Northeasterly).
242	S 132 (3)	5-15-61	8.2 miles surfacing, plant mix bituminous and seal coat oiling (Billings South).
243	S 184 (3)	7-15-61	15.3 miles grading, drainage, and surfacing (Hammond Northeast).
	OFF SYSTEM PROJECTS		
301	R-AD-5 (2)	9-1-61	3.0 miles grading, drainage, and aggregate surfacing (North of Flaxville).

SUPERVISOR TRAINING (Continued from page 4)

course was given at the five department district headquarters and in Helena. Approximately 160 department employees received this training.

The course covered the basic principles of, "Organization and Administration" by A. W. Greiner, Administrative Engineer; "Supervision and Planning" by Charles King, Specifications Engineer; "Communications" by Walker Brown, Secondary Roads Engineer; "Behavior, Attitudes, Motivations and Discipline" by William Ashton, Assistant Materials Engineer; "Evaluation of Personnel" by a Division or Department head who had attended the "Middle Management Training Course" and "Supervisory Methods" by Ross G. Henry, Training-in-Service Engineer.

In addition, a three-hour evening session was conducted with the objective of illustrating and providing for the retention of factors entering into and resulting from proper planning, organizing and controlling as well as the mechanics of orderly procedures.

It is expected that the supervisory personnel who participated in the course profited more directly in the area of personal administrative development.

LONGEVITY

34 employees completed a total of 425 years during April, with Louis Alexander and Charles Benjamin topping the list with 30 years service apiece. Bob O'Leary, Tom Bulman, and Lewis Averett completed 25 years of faithful service, and J. P. Smith, Paul M. Johnson, and Roy A. Clute have served the Highway Department for 20 years. There were 8 with 15 years, four with 10 years and 14 with 5 years. *Congratulations.*

INTERSTATE SCOREBOARD

The Interstate Division reports that, as of May 1, Montana has a total of 168.489 miles of Interstate Highway complete or under construction in Montana. We predict that by the end of 1961 we'll be well over the 200 mile mark, and increasing steadily the number of miles of completed Interstate built each year. We further predict that when the completion of the nation-wide system of 41,000 miles is due in 1972, that Montana can point with pride to the nearly 1,200 miles that will be finished in our state by that time.

SAM, SAM, THE HIGHWAY MAN

Fellows that worked for the Engineers or the Air Corps in Canada or Alaska during the war are familiar with Sam, Sam, the Highway Man, and although we try to publish appropriate poems, this literary effort, due to its very earthiness, will never make Centerline. However, as an outgrowth of the severe storm that hit Northeastern Montana during the week of April 24-28 produced our own version of Sam the Highway Man.

Sam was operating unit 42-5, out of Culbertson, and he, in cooperation with every other plow and vehicle were attempting to keep the roads open in that area. It was a difficult job, and they were all hard pressed to keep ahead of the wind and the snow, but it seems that Sam had other complications. He was attempting to get an expectant young mother into Wolf Point to the hospital to have her first baby. Well—they never made it in time to have the baby in the hospital, and Sam can be real proud of himself in delivering the baby.

To you then, Sam, we offer the Highway Department's accolade for the month, and we are sure that a young mother and her baby will be eternally grateful to you. Perhaps someone in the department will compose a poem about you.

463,409 KILLED ON NATION'S HIGHWAYS —1960 TO 1970

The alarming increase in the number of fatalities on Montana's Highways so far in 1961 should be a matter of grave concern to all of us that travel the state's roads. To carry the matter further, however, and look at the nationwide picture projected for the next ten year should be shocking enough to call for drastic action by all concerned. The Automotive Safety Foundation has projected a few statistics for the next decade, which we would like to pass on to you.

	Year 1960	Year 1970
Vehicle Registration	74 million	100 million
Drivers	87 million	120 million
Travel (vehicle miles)	720 billion	1 trillion
Deaths from accidents	38,200	53,000 (at present rate)
Injuries (annual)	1.4 million	1.9 million
Economic cost (annual)	$6.4 billion	$8.9 billion

The 10-year cumulative number and cost of accidents (1960-1970) if the current fatality rate is NOT reduced:

Deaths	463,400
Injuries	14.5 million
Economic losses	$77.5 billion

Another bridge in the Billings Division that is getting along nicely is the bridge across the Yellowstone at Reed Point. Cahoon also has this contract in the amount of $208,204.00, with completion scheduled for late summer.

The Center Line
STATE HIGHWAY DEPARTMENT
Helena, Montana

4

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